(b) evaporating a proportion of the solvent from the mixture to obtain a syrup; and

(c) exposing the syrup to reduced pressure at a temperature that causes [boiling] foaming of the syrup at said pressure, resulting in formation of an FGM.

14. (twice amended) The method according to claim 1, wherein the evaporation in step (b) occurs at an external temperature higher than about 25°C.

26. (twice amended) The method according to claim 1, wherein the pressure during step (c) is below about 30 mm Hg.

30. (twice amended) The method according to claim 1, wherein the [boiling] foaming during step (c) occurs at an external temperature above about 25°C.

49. (twice amended) The method according to claim 1, further comprising adding a [substance] biologically active agent to be preserved to the mixture before formation of the FGM.

54. (twice amended) The method according to claim 49, wherein the [substance] biologically active agent to be preserved is selected from the group consisting of cells, subcellular components, bacteria, and viruses.

55. (twice amended) The method according to claim 49, wherein the [substance] biologically active agent to be preserved is selected from the group consisting of lipids, proteins, peptides, peptide mimetics, oligosaccharides, oligonucleotides, and protein nucleic acid hybrids.

56. (twice amended) The method according to claim 55, wherein the [substance] biologically active agent to be preserved is a protein or peptide selected from the group consisting of enzymes, monoclonal antibodies, interferons, interleukins, cytokines, hormones, and other growth factors.

57. (twice amended) The method according to claim 50, wherein the [substance] biologically active agent to be preserved is a vaccine.

59. (twice amended ) A method for providing a reconstituted [substance] biologically active agent, comprising producing an FGM according to the method of claim 1 into which the

[substance] biologically active agent is incorporated, and then contacting the FGM with sufficient solvent for the glass matrix forming material to dissolve the material.

62. (twice amended ) A method for preserving a [substance] biologically active agent within a thin, foamed glass matrix (FGM) comprising the steps of:

(a) preparing an initial mixture comprising at least one glass matrix-forming material, a solvent therefor, and the [substance] biologically active agent to be preserved;

(b) evaporating a proportion of the solvent from the mixture to obtain a syrup; and

(c) exposing the syrup to a pressure and temperature that causes [boiling] foaming of the syrup, resulting in formation of an FGM.

63. (twice amended ) The method according to claim 62, wherein the solvent is a solvent for both the glass matrix-forming material and the [substance] biologically active agent.

64. (twice amended ) The method according to claim 62, wherein the mixture prepared in step a) comprises different solvents for the glass matrix-forming material and the [substance] biologically active agent.

65. (twice amended) A method for producing a single dose of a [substance] biologically active agent, comprising the steps of:

(a) preparing an initial mixture comprising at least one glass matrix-forming material, a solvent therefor, and the [substance] biologically active agent;

(b) evaporating a proportion of the solvent from the mixture to obtain a syrup;

(c) exposing the syrup to a pressure and temperature that causes [boiling] foaming of the syrup, resulting in formation of an FGM; and

(d) optionally reducing residual moisture.

66. (twice amended ) The method according to claim 65, wherein the solvent is a solvent for both the glass matrix-forming material and the [substance] biologically active agent.

67. (twice amended ) The method according to claim 65, wherein the mixture prepared in step a) comprises different solvents for the glass matrix-forming material and the [substance] biologically active agent.

70. (twice amended ) A method for reconstituting a [substance] biologically active agent that is incorporated into thin, foam glass matrices (FGMs), comprising contacting the FGMs with sufficient solvent for glass matrix forming material in the FGMs to dissolve the material.

72. (twice amended ) A composition comprising at least one [substance] biologically active agent preserved in an FGM, [obtainable] obtained by the method of claim 62, wherein step (c) is conducted at reduced pressure.

73. (twice amended ) A reconstituted [substance] biologically active agent [obtainable] obtained by preserving the [substance] biologically active agent within an FGM according to claim 62 wherein step (c) is conducted at reduced pressure, and then contacting the FGM with sufficient solvent for the glass matrix forming material to dissolve the material.

75. (twice amended ) A reconstituted single dose of a [biological substance] biologically active agent [obtainable] obtained by producing a single dose of a [substance] biologically active agent preserved within an FGM according to claim 65 wherein step (c) is conducted at reduced pressure, and then contacting the FGM with sufficient solvent for the glass matrix forming material to dissolve the material.

80. (amended) The method according to claim 3, wherein the carbohydrate is selected from the group consisting of trehalose, maltitol, lactitol, palatinit, [GPS, and GPM] 6-α-D-glucopyranosyl-sorbitol and 6-β-D-glycopyranosyl-mannitol.

81. (amended ) The method according to claim 49, wherein the [substance] biologically active agent to be preserved is a physiologically active small molecule selected from the group consisting of Cyclosporin A and other immunosuppressive agents, beta blockers, H2 agonists, H2 antagonists, steroids, sex hormones, Phenobarbitals, analgesics, antimicrobials, antivirals, antiinflammatories, antiarthritics, antispasmodics, antidepressants, antipsychotics, tranquilizers, antianxiety drugs, narcotics, antiparkinsonism agents, cholinergic agonists, chemotherapeutics, appetite suppressants, anticholinergics, antiemetics, antihistaminics,

antimigraine agents, vasodilators, contraceptives, antithrombotic agents, diuretics, antihypertensives, cardiovascular drugs, and opioids.

84. (amended ) The method according to claim 62, wherein the [substance] biologically active agent to be preserved is in suspension in the mixture.

85. (amended ) The method according to claim 62, wherein the [substance] biologically active agent to be preserved is dissolved in the mixture.

86. (amended ) The composition of claim 72, wherein the [substance] biologically active agent is selected from the group consisting of cells, subcellular components, bacteria, and viruses.

87 (amended ) The composition of claim 72, wherein the [substance] biologically active agent is selected from the group consisting of lipids, proteins, peptides, peptide mimetics, oligosaccharides, oligonucleotides, protein nucleic acid hybrids, and physiologically active small molecules.

88. (amended ) The composition of claim 72, wherein the [substance] biologically active agent is a protein or peptide selected from the group consisting of enzymes, monoclonal antibodies, interferons, interleukins, cytokines, hormones, and other growth factors.

89. (amended ) The composition of claim 72, wherein the [substance] biologically active agent is a vaccine comprising a component selected from the group consisting of live and attenuated viruses, nucleotide vectors encoding antigens, live and attenuated bacteria, antigens, antigens mixed with adjuvants, and haptens coupled to carriers.

91. (amended) A method for producing thin, foamed glass matrices (FGMs), comprising the steps of:

(a) preparing an initial mixture comprising at least one glass matrix-forming carbohydrate, a solvent therefor, and at least one foam-promoting additive which is a volatile salt or a salt that decomposes at reduced pressure to give a gaseous product;

(b) evaporating a proportion of the solvent from the mixture to obtain a syrup; and